

DRAFT

Profiles and Economic Contribution:
General Visitors to Monroe County, Florida
2000-2001

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Any errors in the data and analyses presented here are the responsibility of the authors.

Preface

This report is based on a survey of the “General Visitor” population of Monroe County conducted as part of the “Socio-economic Study of Reefs in Southeast Florida”. The Reef Study was a multi-agency partnership between the National Oceanic and Atmospheric Administration (NOAA), the Florida Fish and Wildlife Conservation Commission and the four counties of Palm Beach, Broward, Miami-Dade and Monroe.

Visitors to Monroe County were defined as all those that were not permanent residents of Monroe County. Under this definition, visitors to Monroe County include residents of neighboring counties and seasonal visitors, as well as people on business trips or those just passing through.

In this report, we provide a profile of the “General Visitor” population of Monroe County and provide estimates of the economic contribution that visitors make to the Monroe County economy. Expenditures by visitors are limited to those trip expenditures made in Monroe County. Economic contribution is measured as output/sales, income, and the number of full and part-time jobs, in Monroe County only.

To estimate total expenditures and economic contribution requires estimates of total visitation. The Reef Study included estimation of the total number of visitors in the “General Visitor” population as measured by the number of person-trips and the number of person-days. These two measurements are defined and explained in the first section of this report. The details of how visitation was estimated will be available in a forthcoming technical appendix. The technical appendix will be posted on our Web site as soon as it is available.

Profiles are provided and comparisons made between summer and winter visitors. The summer was defined as June – November 2000 and the winter was defined as December 2000 – May 2001. The year for this study was therefore defined as from June 2000 through May 2001.

As mentioned above, the “General Visitor” survey was part of the larger study on reef users. The study covered Palm Beach, Broward, Miami-Dade and Monroe counties. Surveys were conducted for both visitors and residents of each county that used either the artificial or natural reefs off the coast of each county. The results of reef study can be found on our Web site (<http://marineeconomics.noaa.gov>) under the theme Artificial and Natural Reefs, Southeast Florida. The report is in downloadable portable document format (pdf). Chapter 6 of the report is devoted to the residents and visitors to Monroe County that used the reefs off the coast of Monroe County during the period June 2001 through May 2001.

Statistical Tests. Throughout this report we present comparisons between summer and winter visitors. For continuous variables such as annual visits, annual days, length of stay (days or nights), age, party size and expenditures per person-trip we used two-sample T-tests for differences in the means. For discrete variables (categorical response variables) or continuous for which we produced intervals for bar chart presentation, we used a non-parametric test for differences in the distributions. The test used was the Kolgomove-Smirnoff two-sample test. The basis used for deciding statistical significance was the five (5) percent level of significance.

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General Visitor Survey

For purposes of this study, a “General Visitor” to Monroe County was defined as anyone that was not permanent resident of Monroe County. Thus, residents of neighboring counties, seasonal residents as well as those on business trips or those just passing through were considered part of the “General Visitor” population.

Visitors were surveyed in two seasons (summer and winter). The summer season was defined as June through November 2000, while the winter season was defined as December 2000 through May 2001. The survey-sampling period for the summer season was from June 21, 2000 through September 5, 2000. The winter survey-sampling period was from February 22, 2001 through April 12, 2001. The summer season surveys were conducted by the Bicentennial Volunteers, Inc. and Rife Market Research out of Miami, Florida. The Bicentennial Volunteers, Inc. conducted all the winter surveys.

A total of 1,210 interviews were completed (648 summer season and 562 winter season). These sample sizes were considered adequate for getting reliable estimates of spending by season to support the estimation of economic contribution of visitors to the Monroe County economy. All interviews were conducted on-site and face-to-face. Interviews were conducted at over 100 sites throughout the county, including hotels, motels, campgrounds, parks, marinas, boat ramps, and various tourist attractions. Local knowledge was used to stratify samples across sites. Hazen and Sawyer, P.C. managed the survey under contract to Monroe County, Florida.

The survey asked (see Appendix A for General Visitor Survey Questionnaire) for how visitors accessed Monroe County. We collapsed the larger number of categories to those in Table

1. The survey did not adequately sample cruise ships and those arriving by their own boat (Table 1). Therefore, the profiles in this report are limited to those that arrived by auto and air modes of transportation. For economic contributions, we used the survey expenditures profiles for cruise ship visitors from the 1995-96 study inflated by the consumer price index multiplied by updated cruise ship visitation data from the City of Key West.

Visitation

Visitation to Monroe County was estimated using two measurements; 1) person-trips and 2) person-days.

Concept of a Person-trip. For any given day, the number of person-trips and the number of visitors is the same. But once the time period for estimation is expanded beyond one day, then the possibility exists that the same person can make more than one trip (visit). Because visitors are interviewed as they are leaving Monroe County (ending their visit), a visitor is counted each time they visit Monroe County. This is the concept of a person-trip or visit. We can use these two terms interchangeably.

Number of Visitors. The number of person-trips (visits) and the number of visitors are two measurements that have long been a source of confusion. The old Florida Division of Tourism had long confused these two measurements. For the two measurements to be equivalent requires that for a given period of estimation, each person make only one visit (trip). Although this is true for a majority of visitors to Monroe County, it is not true for all visitors. Visitors during the summer season made on average three annual visits to Monroe County, while winter visitors made on average 1.7 annual visits to the County. To get an estimate of the separate number of people that visited Monroe County,

one has to divide the number of person-trips (visits) by the average number of visits (trips) each person made to the County.

Number of Person-days. Another useful measurement is the number of person-days. Each visit (trip) may have a different length of stay. For day-trips, the concept of a person-day and a person-trip are thus equivalent. But many trips (visits) are for more than one day. The average auto and air visitor to Monroe for the period June 2000 – May 2001 stayed on average 5.33 (3.90 if cruise ship passengers are included) days on each visit (trip). Multiplying the average length of stay by the number of person-trips (visits) for a given time period yields an estimate of the number of person-days for that time period. Dividing the estimate of the total number of person-days by the number of days in the given time period yields an estimate of the average number of visitors in Monroe County for the average day during that time period. This latter estimate is used in assessing the “functional population”, i.e., the number of people in Monroe County on a given day. The concept of a “functional population” is used in planning for facilities and services.

Summary: Person-trips (visits)

For the time period June 2000 – May 2001, we estimate the General Visitor population made over 3.1 million person-trips (visits) to Monroe County. Over 1.5 million person-trips were made during the summer season (June 2000 – November 2000) and almost 1 million person-trips were made during the winter season (December 2000 – May 2001). See Table 2.

Summary: Person-days

For the time period June 2000 – May 2001, we estimate the General Visitor population spent over 12.1 million person-days in Monroe County. Summer visitors spent over 5.5 million person-days in the County, while winter visitors spent about 6.6 million person-days in the County. On an average summer day, there were 15,175 visitors in Monroe County, while in the winter there was, on average, 18,052 visitors in Monroe County. The functional population of Monroe County is significantly higher in the winter than the summer months.

Table 1. Number of Completed Questionnaires by Mode of Access and Season: Monroe County

	Summer		Winter		Total	
	#	%	#	%	#	%
Auto	583	90.0	529	94.1	1,112	91.9
Air	56	8.6	30	5.3	86	7.1
Cruise Ship	2	0.3	2	0.4	4	0.3
Own Boat	7	1.1	1	0.2	8	0.7
Total	648	100.0	562	100.0	1,210	100.0

Table 2. Monroe County Visitation

	Summer	Winter	Total
Person-trips			
Auto, Air and Own Boat Visitors	1,288,464	1,263,466	2,551,930
Cruise Ship Visitors	224,635	332,832	557,467
Total	1,513,099	1,596,298	3,109,397
Person Days			
Auto, Air and Own Boat Visitors	5,314,305	6,256,296	11,570,601
Cruise Ship Visitors	224,635	332,832	557,467
Total	5,538,940	6,589,128	12,128,068

Origin of Visitors

One of the most important pieces of information for assessing market demand is the origin or primary place of residence of visitors. In the survey, very detailed information was gathered on the location of visitors' primary place of residence. We summarize this by Country, State or Territory within the U.S., and by County for Florida residents. Within the U.S. we also summarize by Census Region and Division. In each summary table, we provide percentage distributions in two ways. First, we provide Country, State or Territory, or Florida County as a percent of "ALL VISITORS". The second distribution differs by topic. For Country, we provide the distribution among "Foreign Visitors Only". For example, Table 3 shows that during the summer season 2.3 percent of All Visitors were from Germany. But, Germans made up 18.8 percent of "All Foreign Visitors". Table 4 shows that 49.7 percent of All Summer Visitors were from other Florida counties, but those summer visitors from Florida accounted for 56.7 percent of "All U.S. Visitors". Similarly, Table 5 shows the distribution of visitors from other Florida counties. About 19.3 percent of "All Summer Visitors" were from neighboring Miami-Dade County, while Miami-

Dade County residents accounted for 38.8 percent of "All Florida Summer Visitors".

Country. The summer and winter markets are quite different. A significantly higher proportion of winter visitors is foreign visitors than is summer visitors (15.3% foreign in the winter and 12.3% foreign during the summer—See Figure 1). Canadians made-up 1.1 percent of the summer visitors and 4.4 percent of the winter visitors. During the winter season, Canadians accounted for over 29 percent of foreign visitors.

States. Table 4 shows the top five States of visitor residence by season. See Appendix Table A.1 for the details for all States. Florida was ranked number one in both the summer and winter seasons. Annually, visitors from other Florida counties account for 37.6% of all visitors to Monroe County. New York ranks number two annually, followed by Ohio and Pennsylvania. The pattern is similar by season. Visitors from the Mid-Atlantic states are the leading sources of visitors in both seasons.

Table 3. Top Five Countries of Residence by Season: Monroe County

	Summer			Winter			Annual		
	Rank	All Visitors (%)	Foreign Visitors Only (%)	Rank	All Visitors (%)	Foreign Visitors Only (%)	Rank	All Visitors (%)	Foreign Visitors Only (%)
US States	1	87.3	n/a	1	84.7	n/a	1	86.1	n/a
Germany	2	2.3	18.8	3	3.6	23.3	2	2.9	21.1
Canada	5	1.1	8.8	2	4.4	29.1	3	2.6	19.3
England	3	1.5	12.5	4	2.7	17.4	4	2.1	15.1
Unspecified Foreign	4	1.5	12.5	6	0.5	3.5	5	1.1	7.8
Holland	7	0.8	6.3	5	0.7	4.7	7	0.7	5.4

Table 4. Top Five States in Monroe County by Season

State	Summer			Winter			Annual		
	Rank	All Visitors (%)	U.S. Visitors Only (%)	Rank	All Visitors (%)	U.S. Visitors Only (%)	Rank	All Visitors (%)	U.S. Visitors Only (%)
Florida	1	49.7%	56.7%	1	23.7%	30.0%	1	37.6%	43.6%
Foreign	n/a	12.3%	n/a	n/a	15.3%	n/a	n/a	13.7%	n/a
New York	2	4.3%	4.9%	2	7.5%	9.5%	2	5.8%	6.7%
Ohio	3	2.9%	3.3%	3	5.0%	6.3%	3	3.9%	4.5%
Pennsylvania	5	2.5%	2.8%	5	4.3%	5.4%	4	3.3%	3.8%
New Jersey	6	2.3%	2.6%	6	3.9%	5.0%	5	3.1%	3.5%
Maryland	4	2.8%	3.2%	13	1.6%	2.0%	8	2.2%	2.6%
Illinois	13	1.2%	1.4%	4	4.8%	6.1%	6	2.9%	3.4%

Florida Counties. Distance plays a key role in determining visitation. Neighboring counties of Broward and Miami-Dade to the north of Monroe are the two leading sources of Florida visitors. Broward and Miami-Dade residents account for over 55 percent of all Florida visitors to Monroe County (Table 5).

Census Regions and Divisions. By aggregating States into Census Regions and Divisions, we can see the different patterns across seasons in the origin of visitors. Again we see a higher proportion of visitors coming from the East and Midwest during the winter versus the summer season. From the Midwest, the East Northcentral Division accounts for most of seasonal change, and from the East, the Mid-Atlantic Division accounts for most of the seasonal change (Table 6 and Figure 2).

Table 5. Florida Residents by County and Season

County	Summer		Winter		Annual	
	All Visitors (%)	FL. Visitors Only (%)	All Visitors (%)	FL. Visitors Only (%)	All Visitors (%)	FL. Visitors Only (%)
Alachua	0.3%	0.6%	0.0%	0.0%	0.2%	0.4%
Baker	0.0%	0.0%	0.2%	0.8%	0.1%	0.2%
Brevard	1.4%	2.8%	0.7%	3.0%	1.1%	2.9%
Broward	8.8%	17.7%	3.7%	15.8%	6.4%	17.1%
Charlotte	0.2%	0.3%	0.0%	0.0%	0.1%	0.2%
Collier	1.5%	3.1%	0.5%	2.3%	1.1%	2.9%
Dade	19.3%	38.8%	8.5%	36.1%	14.3%	38.0%
DeSoto	0.2%	0.3%	0.2%	0.8%	0.2%	0.4%
Duval	1.2%	2.5%	0.5%	2.3%	0.9%	2.4%
Escambia	0.2%	0.3%	0.0%	0.0%	0.1%	0.2%
Flagler	0.2%	0.3%	0.2%	0.8%	0.2%	0.4%
Hendry	0.2%	0.3%	0.2%	0.8%	0.2%	0.4%
Hillsborough	1.4%	2.8%	0.5%	2.3%	1.0%	2.6%
Indian River	0.5%	0.9%	0.2%	0.8%	0.3%	0.9%
Lake	0.5%	0.9%	0.2%	0.8%	0.3%	0.9%
Lee	0.5%	0.9%	0.9%	3.8%	0.7%	1.8%
Leon	0.3%	0.6%	0.0%	0.0%	0.2%	0.4%
Manatee	0.2%	0.3%	0.2%	0.8%	0.2%	0.4%
Marion	0.2%	0.3%	0.0%	0.0%	0.1%	0.2%
Martin	0.3%	0.6%	0.2%	0.8%	0.2%	0.7%
Nassau	0.2%	0.3%	0.0%	0.0%	0.1%	0.2%
Okaloosa	0.0%	0.0%	0.2%	0.8%	0.1%	0.2%
Okeechobee	0.3%	0.6%	0.0%	0.0%	0.2%	0.4%
Orange	2.3%	4.7%	1.6%	6.8%	2.0%	5.3%
Palm Beach	3.9%	7.8%	2.7%	11.3%	3.3%	8.8%
Pasco	0.3%	0.6%	0.2%	0.8%	0.2%	0.7%
Pinellas	1.2%	2.5%	0.4%	1.5%	0.8%	2.2%
Polk	0.9%	1.9%	0.0%	0.0%	0.5%	1.3%
Sarasota	0.3%	0.6%	0.7%	3.0%	0.5%	1.3%
Seminole	1.1%	2.2%	0.0%	0.0%	0.6%	1.5%
St Johns	0.2%	0.3%	0.4%	1.5%	0.2%	0.7%
St Lucie	0.2%	0.3%	0.0%	0.0%	0.5%	1.3%
Suwannee	0.2%	0.3%	0.0%	0.0%	0.1%	0.2%
Volusia	0.9%	1.9%	0.5%	2.3%	0.7%	2.0%
Walton	0.0%	0.0%	0.2%	0.8%	0.1%	0.2%

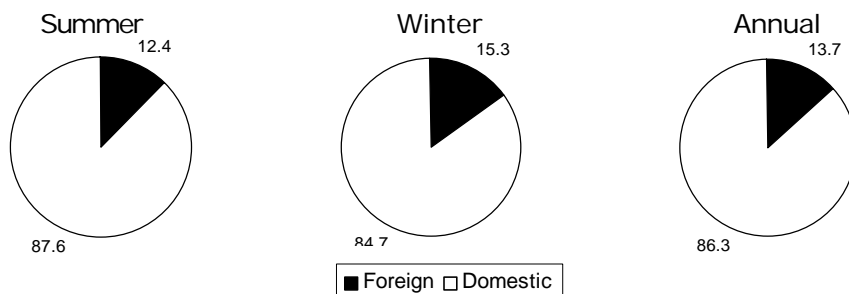


Figure 1. Foreign vs. Domestic Visitors by Season

Table 6. Census Regions and Divisions of Residency by Season

Census Region/Division	Summer		Winter		Annual	
	All Visitors	U.S. Visitors Only	All Visitors	U.S. Visitors Only	All Visitors	U.S. Visitors Only
East	11.6%	13.2%	24.2%	28.6%	17.4%	20.2%
New England	2.5%	2.8%	8.5%	10.1%	5.3%	6.1%
Mid-Atlantic	9.1%	10.4%	15.7%	18.5%	12.1%	14.1%
South	63.6%	72.5%	34.7%	41.0%	50.2%	58.1%
West South Central	2.2%	2.5%	1.6%	1.9%	1.9%	2.2%
East South Central	2.8%	3.2%	1.2%	1.5%	2.1%	2.4%
South Atlantic	58.6%	66.9%	31.9%	37.6%	46.2%	53.5%
Midwest	7.9%	9.0%	21.5%	25.4%	14.2%	16.5%
East North Central	6.2%	7.0%	18.5%	21.8%	11.9%	13.8%
West North Central	1.7%	1.9%	3.0%	3.6%	2.3%	2.7%
West	4.3%	4.9%	4.3%	5.0%	4.3%	5.0%
Mountain	3.1%	3.5%	2.7%	3.2%	2.9%	3.4%
Pacific	1.2%	1.4%	1.6%	1.9%	1.4%	1.6%
U.S. Territories	0.3%	0.4%	0.0%	0.0%	0.2%	0.2%

Figure 2. Census Regions of Residence by Season

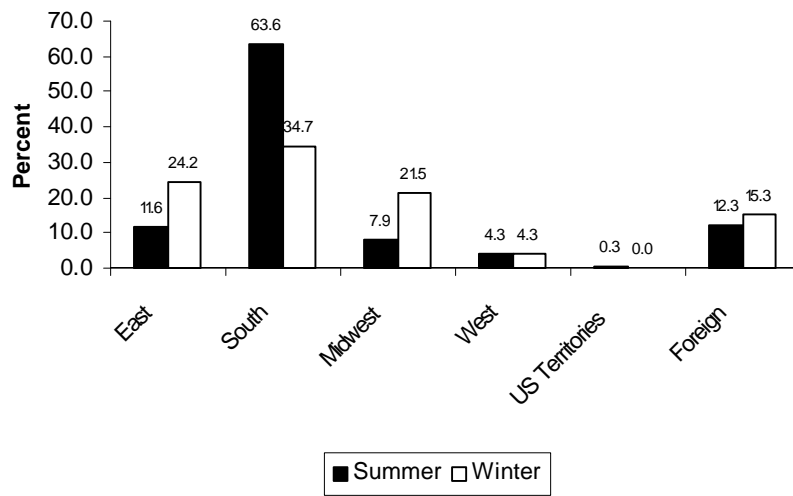
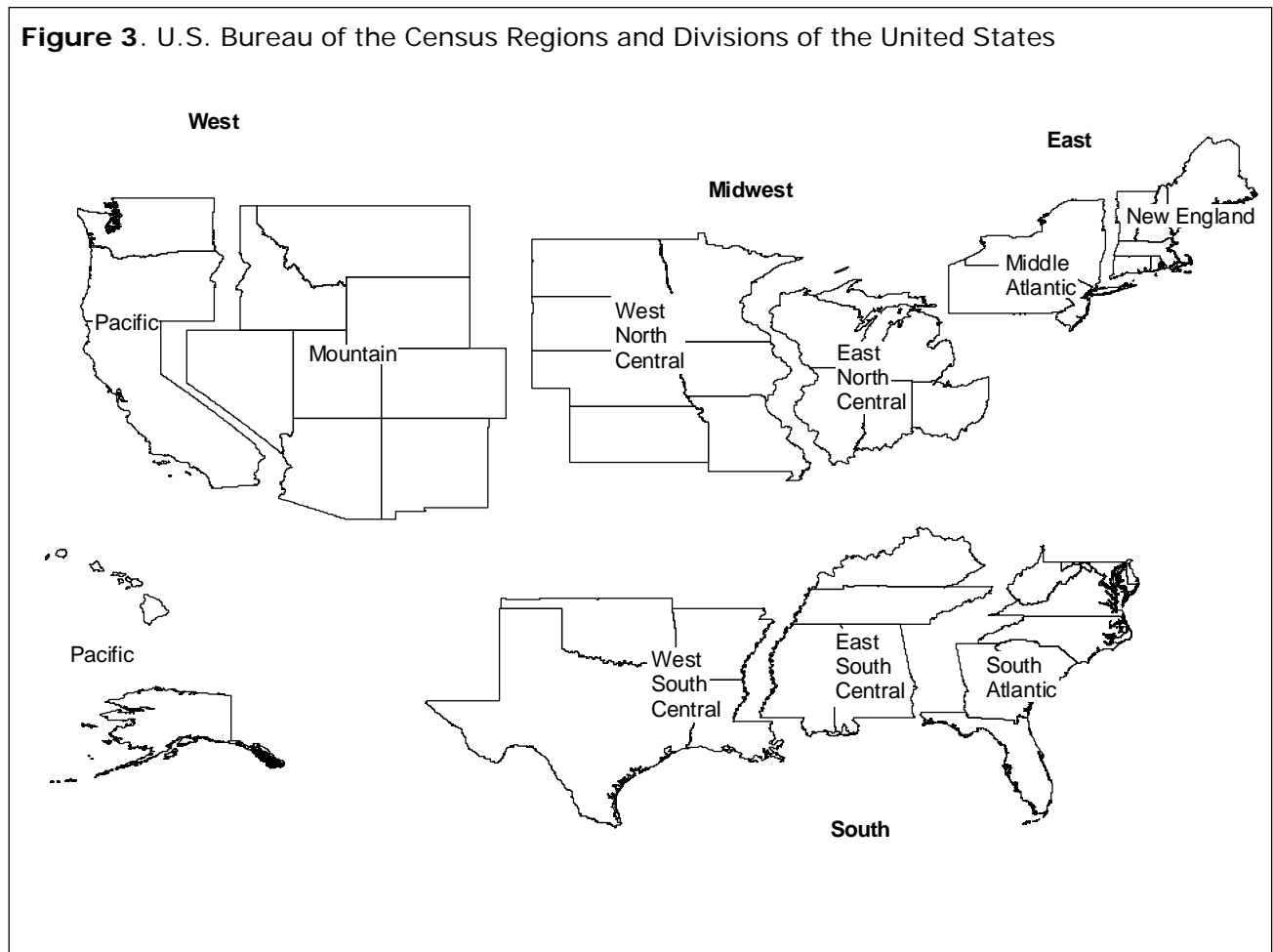


Figure 3. U.S. Bureau of the Census Regions and Divisions of the United States



Number of Annual Visits, Days, Overnight Stays and Length of Trip

The survey obtained several measures of visitation. Visitors were first asked how many times they had visited Monroe County during the past 12 months. They were then asked how many days they spent in Monroe County during the past 12 months. Visitors were then asked how many overnight stays they made in Monroe County during the past 12 months. They were then asked how many nights they stayed in Monroe County on the interview trip. How many days they were in Monroe County on the interview trip was derived from information obtained on month, day and arrival time and month, day and time of departure from the County.

We used a set of rules for calculating the number of days (length of trip) in Monroe County for the interview trip. If a person arrived after 10:00 PM, we did not count that day. If a person was leaving or planning to leave the County before noon, we did not count the day. If the person arrived after 10:00 PM and was leaving before noon the next day, then we assigned them one day.

Hazen and Sawyer used number of nights plus one for calculating person-days found in Table 2, instead of our length of trip measured in days using our method of calculation above. There is a slight difference between length of stay measured in days and length of stay measured in number of nights plus one. The differences are not significant (see Figures 7 & 8).

Annual Visits. On average visitors to Monroe County made 2.4 visits annually. Summer visitors, on average, made three trips, while winter visitors made, on average 1.7 trips. The differences were statistically significant (Figure 4).

Winter visitors had a lower mean number of visits in the past 12 months and constituted a higher proportion of those who visited the county only once in the past 12 months.

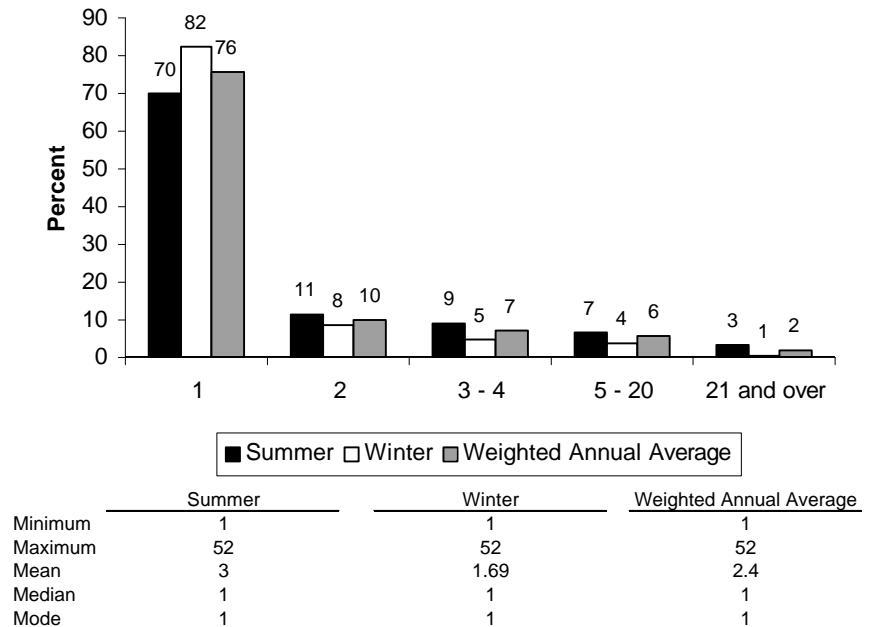


Figure 4. Annual Visits by Season

Winter visitors constituted a higher proportion of those who visited the county one day and 8 to 14 days in the past 12 months, while summer visitors constituted a higher proportion of those who visited two to three days in the past 12 months.

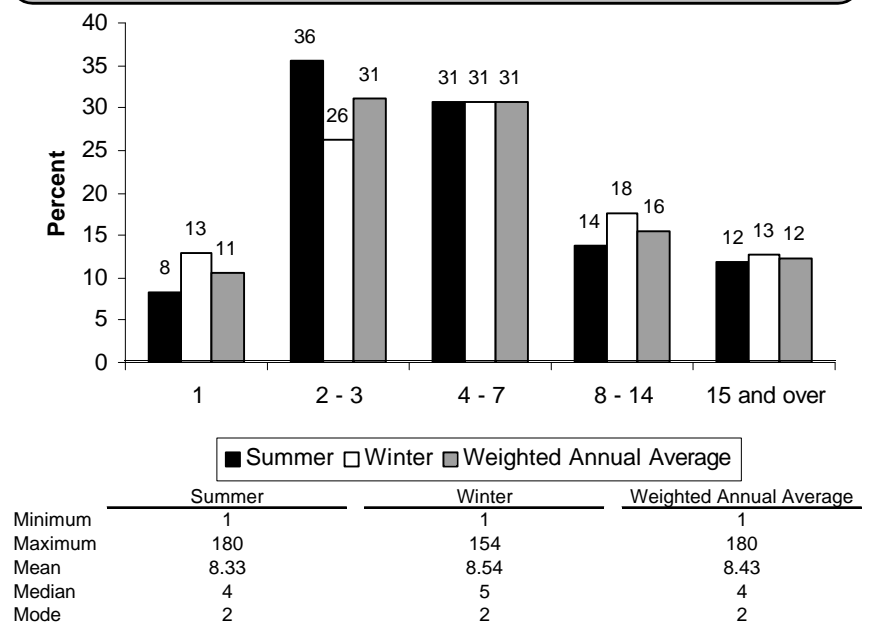
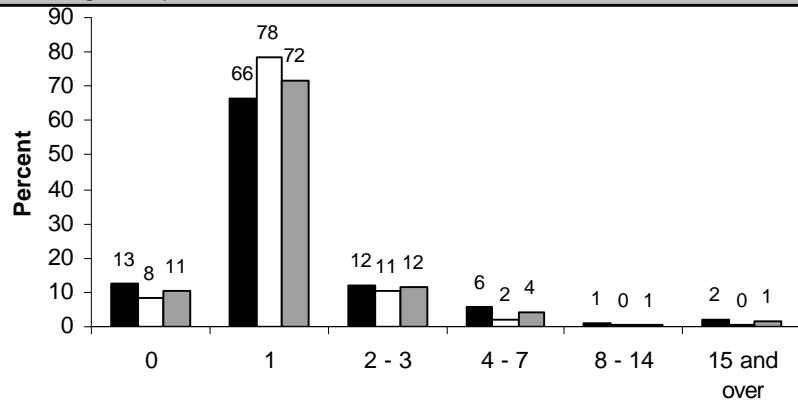


Figure 5. Annual Days by Season

Annual Days. On average, visitors to Monroe County spent over 8 days in the County over the past 12 months. Winter and summer visitors spent about the same number of days in the county. The difference was not statistically significant but there was a significant difference in the distributions of number of days by season. Summer visitors had a significantly higher proportion of two to three day visitors than winter visitors, while winter visitors had a significantly higher proportion of those who visited one day and eight to fourteen days per year (Figure 5).

Summer visitors constituted a higher proportion of those who took zero overnight trips in the past 12 months, while summer visitors constituted a higher proportion of those who took one overnight trip.



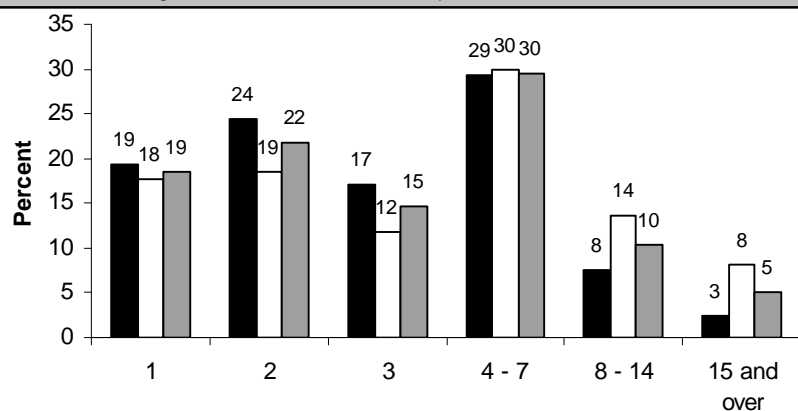
Annual Number of Overnight Stays. On average, visitors to Monroe County made about 1.7 overnight trips to the County annually. Summer visitors made an average of 2.1 overnight trips, while winter visitors made an average of 1.2 overnight trips. This difference was statistically significant. Winter visitors made-up a higher proportion who made one overnight trip, while summer season visitors made up a higher proportion of those who took no overnight trips. (Figure 6).

	Summer	Winter	Weighted Annual Average
Minimum	0	0	0
Maximum	52	20	52
Mean	2.06	1.22	1.67
Median	1	1	1
Mode	1	1	1

Figure 6. Annual Number of Overnight Trips by Season

Length of Trip (Days). On average, visitor trips to Monroe County were over 5 days in length. The length of winter season trips were longer than summer season trips (6.91 days versus 3.96 days). The difference was statistically significant. About 35 percent of the winter season trips were one day in length versus on 28 percent of summer season trips. About 40 percent of summer season visitors spent over four days in Monroe County on their trips, while 52 percent of winter season visitor trips were over four days (Figure 7).

Summer visitors constituted a higher proportion of those taking between one and three days on the interview trip, while winter visitors constituted a higher proportion of those taking over four days on the interview trip.



	Summer	Winter	Weighted Annual Average
Minimum	1	1	1
Maximum	63	154	154
Mean	3.96	6.91	5.33
Median	3	4	3
Mode	2	2	2

Figure 7. Length of Stay (# of Days) by Season

Length of Trip (Nights). Length of trip as measured by the number of days in the County provides a useful measure for looking at the opportunity to undertake activities. Length of trip measured by the number of nights adds information to assess the demand for overnight accommodations. On average, visitors to Monroe County spent 4.88 nights in Monroe County on their most recent trip. Winter visitors spent more nights than summer visitors (6.54 nights versus 3.44 nights), and the difference by season was statistically significant. Summer season visitors constituted a higher proportion of day visitors (zero overnights), while winter visitors made up a higher proportion of those taking greater than four days on the interview trip (Figure 8).

Summer visitors constituted a higher proportion of day trippers and those spending two to three days on the interview trip while winter visitors constituted a high proportion of those taking over four nights on the interview trip.

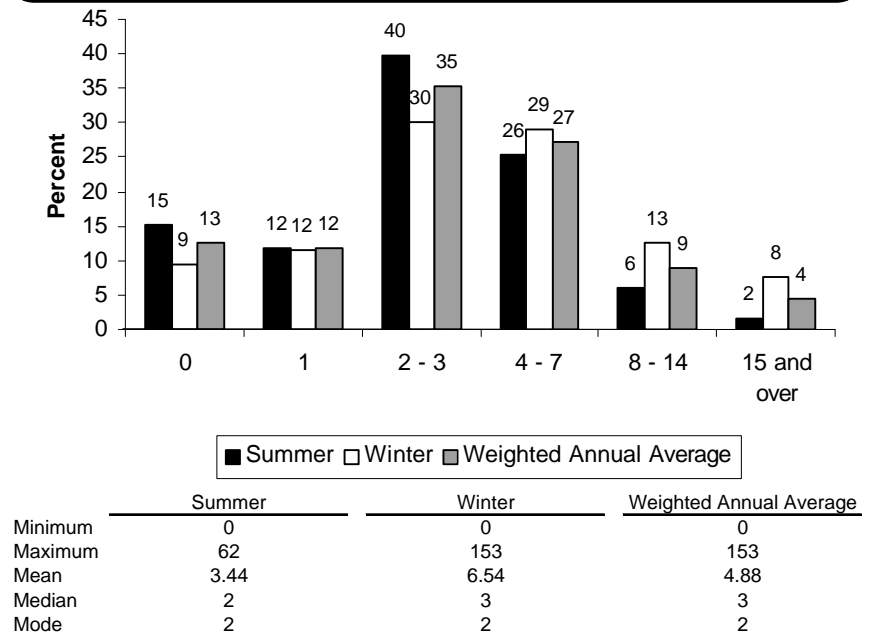


Figure 8. Number of Nights on Interview Trip by Season

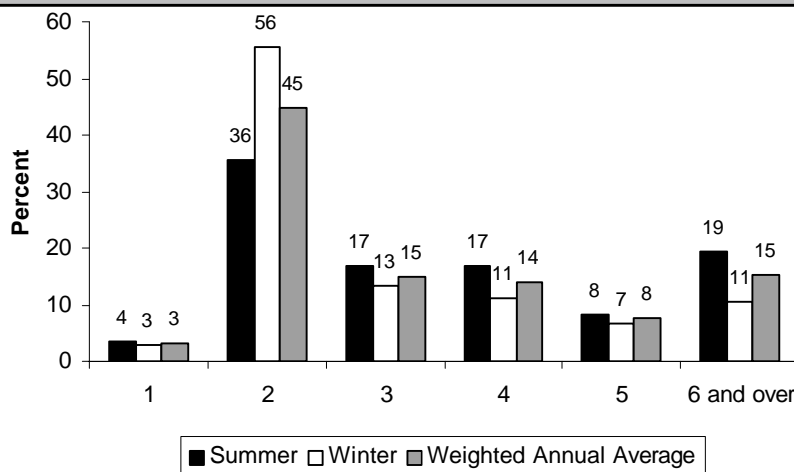
Demographic Profiles

The General Visitor Survey obtained information on 1) total party size, including residents of Monroe County that were accompanying visitors while engaging in visitor/tourist activities, 2) total party size, excluding residents of Monroe County (necessary for estimating total visitation), 3) number in the party 16 years of age and older, excluding residents of Monroe County, 4) number in party under 16 years of age, excluding residents of Monroe County, 5) Age of survey respondent (limited to those age 16 and older), 6) Race/Ethnicity of survey respondent, and 7) Annual Household Income of survey respondent.

Total Party Size, Including Residents. As will be shown below, a high proportion of visitors to Monroe County comes to visit family and/or friends. In addition, a significant proportion of those staying overnight stay with family or friends. On average, total party size was 3.62 persons (3.98 summer and 3.2 winter). The differences in mean party size between summer and winter visitors was statistically significant. The distributions were also statistically different. A higher proportion of winter visitors traveled with two-person parties while a higher proportion of summer visitors were with parties of three or more persons (Figure 9).

Total Party Size, Excluding Residents. Even though a significant proportion of visitors to Monroe County were visiting and/or staying with family or friends, they did not include them in their tourist activity party. There was no difference between party size including residents and total party size excluding residents (3.62 versus 3.61). See Figure 10.

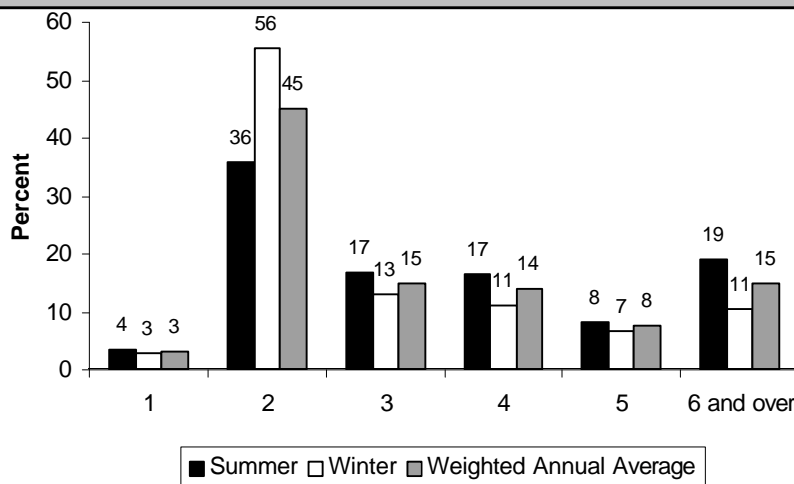
Summer season parties were significantly larger than winter season parties.



	Summer	Winter	Weighted Annual Average
Minimum	1	1	1
Maximum	35	60	60
Mean	3.98	3.2	3.62
Median	3	2	3
Mode	2	2	2

Figure 9. Total Party Size, Including Residents, by Season

The distribution pattern for total party size, excluding residents was no different from that of total party size with residents included.



	Summer	Winter	Weighted Annual Average
Minimum	1	1	1
Maximum	35	60	60
Mean	3.96	3.2	3.61
Median	3	2	3
Mode	2	2	2

Figure 10. Total Party Size, Excluding Residents, by Season

Party Size, those 16 years of age and older, excluding residents. On average, visiting parties consisted of 2.93 people' age 16 or older (3.02 summer and 2.88 winter). The differences in summer and winter party size were not significant. Again, the distribution was similar to total party size. Winter visitors had a higher proportion two-person parties and summer visitors had a higher proportion of one-person parties and parties of three or more persons (Figure 11).

Party Size, those under 16 years of age, excluding residents. Visiting parties contained few people under 16 years of age. On average, parties contained only 0.67 people under 16 years of age. The difference between summer and winter mean number of persons under 16 was statistically significant. Summer visitors parties did contain a higher proportion of people under 16 years of age than winter visitors (Figure 12).

Summer visitors constituted a higher proportion one person parties and parties of greater than three persons.

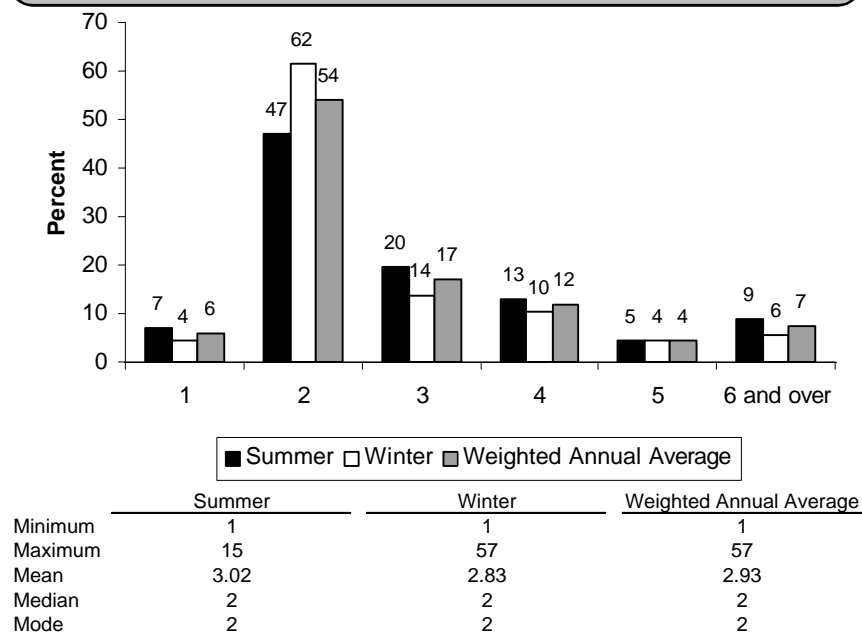


Figure 11. Party Size 16 years of age and over, Excluding Residents, by Season

The majority of visitors were not in a party that included someone under age 16. Summer visitors had a high proportion of those who were under age 16.

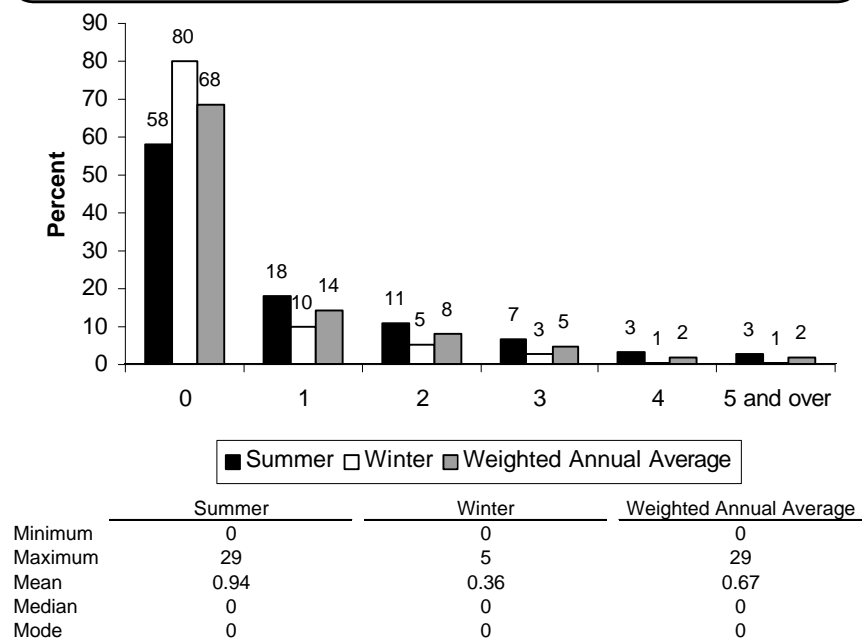


Figure 12. Party Size under 16, Excluding Residents, by Season

Age of the Respondent. The average age of survey respondents was about 45. Winter season visitors were, on average, older than summer season visitors (48.33 versus 42.69) and this difference was statistically significant. The summer and winter season visitors had approximately the same proportion of visitors in the 46 to 60 age category. A significantly higher proportion of summer visitors were age 26 to 35 and 36 to 45 than summer visitors (21% versus 15% and 33% versus 22%, respectively). Winter visitors had a significantly higher proportion of visitors over age 60 than summer visitors (23% versus 7%). See Figure 13.

Summer visitors constituted a higher proportion of those in the 16 to 45 age group, while winter visitors constituted a higher proportion of those 46 years old and over.

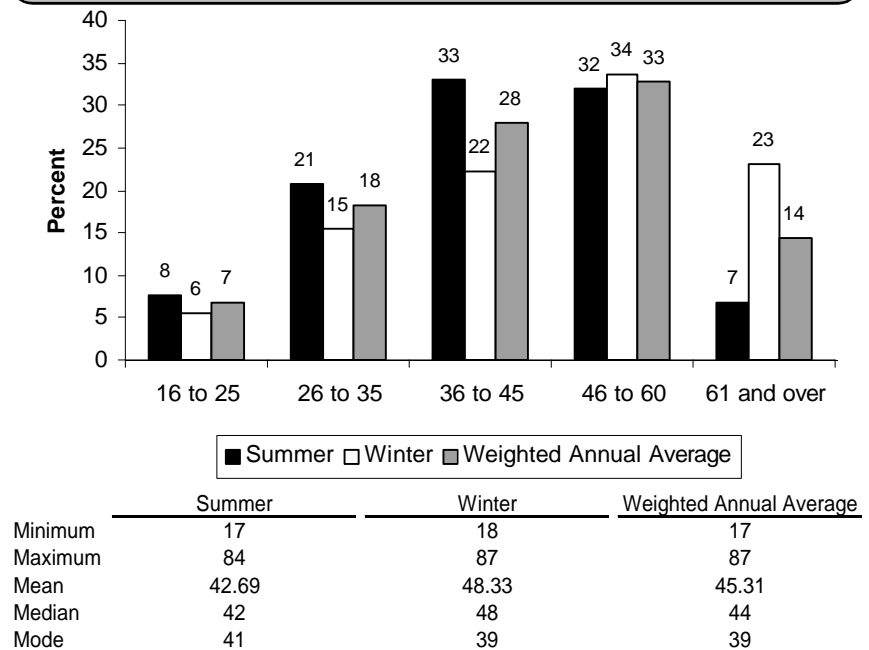


Figure 13. Age of Respondents by Season

Black/African Americans' were a higher proportion of summer visitors than winter visitors (3% summer and 1% winter). Annually, Black/African Americans were 2 percent of the general visiting population. On an annual basis, Whites were 94 percent of the general visitor population (93% summer and 96% winter). See Figure 14.

White visitors tended to visit slightly more in the winter, while Black/African American visitors tended to visit more in the summer.

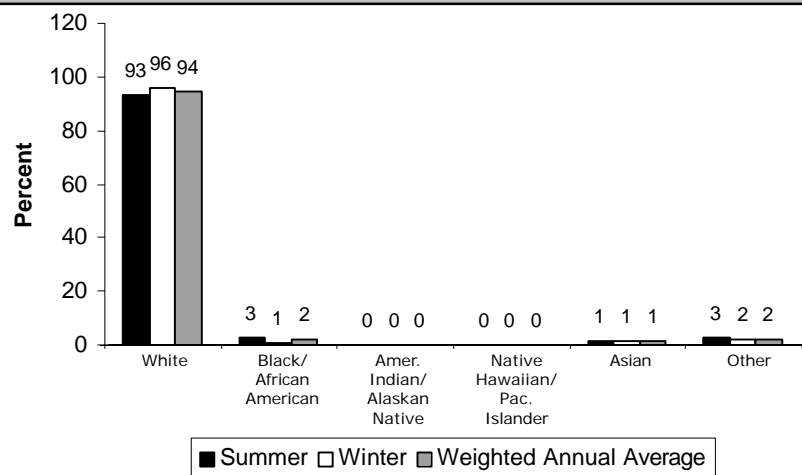


Figure 14. Race by Season

Annual Household Income. In the General Visitor Survey, we asked for annual household income divided into 15 income categories. Table 7 summarizes the results. Over 16 percent refused to answer the income question and there was a significantly higher rate of refusal during the summer season (17.9% winter and 14.8% summer). Results of other surveys report annual household income of visitors in fewer categories, so we have done this in Table 8. There were significant differences in the annual household incomes of summer and winter season visitors. Winter season visitors had higher proportions in the upper income levels. Over 22 percent of winter season visitors had household incomes above \$100,000 versus 13 percent of summer visitors.

Table 7. Annual Household Income, Detailed Categories, by Season

Annual Household Income	Summer	Winter	Annual
Less than \$5,000	1.1%	1.6%	1.3%
\$5,000 to \$9,999	1.1%	0.4%	0.7%
\$10,000 to \$14,999	1.1%	1.2%	1.2%
\$15,000 to \$19,999	3.2%	2.0%	2.6%
\$20,000 to \$24,999	2.6%	2.7%	2.6%
\$25,000 to \$29,999	3.2%	2.5%	2.9%
\$30,000 to \$34,999	5.1%	5.7%	5.4%
\$35,000 to \$39,999	5.6%	4.3%	5.0%
\$40,000 to \$44,999	4.6%	5.7%	5.1%
\$45,000 to \$49,999	4.6%	5.0%	4.8%
\$50,000 to \$59,999	9.0%	9.4%	9.2%
\$60,000 to \$74,999	15.6%	10.9%	13.4%
\$75,000 to \$99,999	12.3%	11.9%	12.1%
\$100,000 to \$149,999	8.3%	14.2%	11.1%
\$150,000 and over	4.6%	7.8%	6.1%
Missing	17.9%	14.8%	16.4%

Table 8. Annual Household Income, Collapsed Categories, by Season

Annual Household Income	Summer	Winter	Annual
Less than \$19,999	6.5%	5.2%	5.9%
\$20,000 to \$39,999	16.5%	15.1%	15.9%
\$40,000 to \$59,999	18.2%	20.1%	19.1%
\$60,000 to \$99,999	27.9%	22.8%	25.5%
\$100,000 and over	13.0%	22.1%	17.2%
Missing	17.9%	14.8%	16.4%

Economic Contribution of Visitors to Monroe County

In the General Visitor Survey, we asked about primary purpose of the trip, type of accommodations used by overnight visitors, and expenditures per party per trip. To extrapolate from sample average expenditures to population total expenditures, requires an estimate of expenditures per person-trip. Total expenditures are equal to average expenditures per person-trip times total person-trips (See Table 2 for person-trips). The survey asks for the number of people in the party that the expenditures cover. We divided party expenditures by the number in the party the expenditure covers to derive expenditures per person-trip.

Table 9 reports the primary purpose of the trip to Monroe County. During the summer season about 89.5 percent of visitors reported "Recreation or Vacation" as their primary purpose for visiting Monroe County versus 92.3% for the winter season. A higher proportion of summer visitors' primary purpose of the trip was to visit family or friends and no winter visitor's purpose of trip was business. Many on business reported that someone else covered their lodging, food and transportation expenditures. These were not recorded as zero expenditure, instead they were recorded as missing or no response, since they are not true zeroes.

Table 10 reports the type of accommodations used by visitors on overnight stays. Annually, over 25 percent of the general visitor population that stays overnight stay in campgrounds (18% summer and 33.5% winter). Those who stayed with family or friends (8.4 percent) all gave zero for lodging expenditures. They are true zeroes and are included in calculating average expenditures.

Expenditures Per Person-trip. Table 11 reports the average expenditures per person-trip by category of expenditure and season. Winter

Table 9. Primary Purpose of Trip by Season

Primary Purpose of Trip	Summer	Winter	Annual
Recreation or Vacation	89.5%	92.3%	90.8%
Visit Family or Friends	7.4%	5.7%	6.6%
Business Trip	1.7%	0.0%	0.9%
Business and Pleasure	1.2%	0.9%	1.1%
Other	0.2%	1.1%	0.6%

Table 10. Type of Accommodations - Overnight Visitors by Season

Type of Accommodations	Summer	Winter	Annual
Hotel/Motel	66.5%	50.9%	59.0%
Family/Friends	8.6%	8.1%	8.4%
Campground	18.0%	33.5%	25.5%
Condo/Second Home	5.0%	3.0%	4.0%
Vacation Rental	1.8%	3.4%	2.6%
Time Share	0.0%	1.2%	0.6%

Table 11. Expenditures Per Person-Trip by Season¹

Expenditures	Summer	Winter	Annual
Auto, Air and Own Boat Visitors			
Lodging	\$ 185.89	\$ 261.08	\$ 223.12
Food and Beverages in a Bar/Restaurant	\$ 84.30	\$ 113.88	\$ 98.95
Food and Beverages from Grocery/Convenience Store	\$ 16.95	\$ 33.17	\$ 24.98
Sport Activity Fees	\$ 19.44	\$ 22.34	\$ 20.88
Admission to Events and Attractions	\$ 5.02	\$ 9.92	\$ 7.45
Evening Entertainment	\$ 5.90	\$ 3.59	\$ 4.76
Rental Car/Taxi/Bus Fare	\$ 19.92	\$ 25.80	\$ 22.83
Shopping (Clothes, gifts)	\$ 40.96	\$ 40.06	\$ 40.51
Other	\$ 4.17	\$ 8.21	\$ 6.17
Total	\$ 382.55	\$ 518.05	\$ 449.65
Cruise Ship Visitors			
Food and Beverages in a Bar/Restaurant	\$ 11.36	\$ 18.14	\$ 15.41
Food and Beverages from Grocery/Convenience Store	\$ 3.53	\$ 6.32	\$ 5.20
Sport Activity Fees	\$ 17.75	\$ 28.84	\$ 24.37
Admission to Events and Attractions	\$ 1.88	\$ 4.49	\$ 3.44
Rental Car/Taxi/Bus Fare	\$ 5.47	\$ 11.23	\$ 8.91
Shopping (Clothes, gifts)	\$ 50.47	\$ 38.84	\$ 43.53
Other	\$ 0.84	\$ 6.68	\$ 4.33
Total	\$ 91.30	\$ 114.54	\$ 105.19
Total - All Visitors	\$ 339.31	\$ 433.92	\$ 387.88

1. Those in bold are statistically different (summer vs. winter)

visitors had a significantly higher average expenditure for both auto, air and boat visitors (\$518.05 vs. \$382.55) & cruise ship visitors (\$114.54 vs. \$91.30).

Expenditures Per Person-day. The conclusion does not change when we normalize expenditures on a per person-day basis. Winter visitors spend significantly more than summer visitors for auto, air and boat visitors. Since cruise ship visitors are, by definition, day visitors, their average expenditures per person-day are the same as their average expenditures per person-trip. Annually, the average visitor spends \$99.44 per person-day in Monroe County (Table 12).

Total Expenditures. Table 13 reports total expenditures made by the general visitor population in Monroe County by season. During the period June 2000 through May 2001, we estimate that general visitors spent about \$1.1 billion in Monroe County. About \$450 million was spent by summer season visitors and over \$660 million by winter season visitors.

Winter visitors had a significantly higher average expenditure for both auto, air and boat visitors and cruise ship visitors.

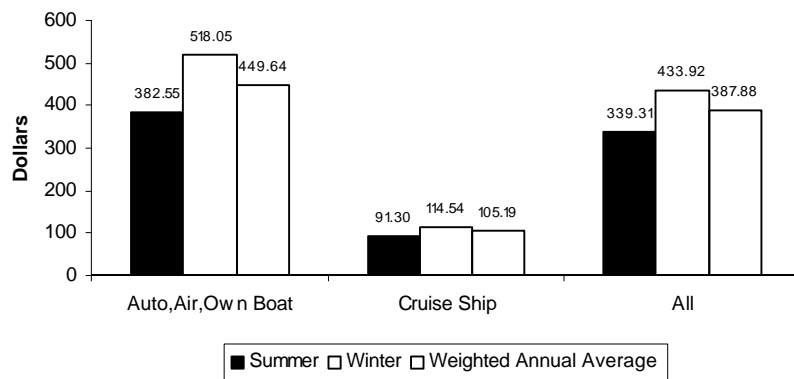


Figure 15. Total Expenditures per Person-trip by Season

Table 12. Expenditures Per Person-Day by Season

Expenditures	Summer	Winter	Annual
Auto, Air and Own Boat Visitors			
Lodging	\$ 45.07	\$ 52.73	\$ 49.21
Food and Beverages in a Bar/Restaurant	\$ 20.44	\$ 23.00	\$ 21.82
Food and Beverages from Grocery/Convenience Store	\$ 4.11	\$ 6.70	\$ 5.51
Sport Activity Fees	\$ 4.71	\$ 4.51	\$ 4.61
Admission to Events and Attractions	\$ 1.22	\$ 2.00	\$ 1.64
Evening Entertainment	\$ 1.43	\$ 0.73	\$ 1.05
Rental Car/Taxi/Bux Fare	\$ 4.83	\$ 5.21	\$ 5.04
Shopping (Clothes, gifts)	\$ 9.93	\$ 8.09	\$ 8.93
Other	\$ 1.01	\$ 1.66	\$ 1.36
Total	\$ 92.75	\$ 104.62	\$ 99.17
Cruise Ship Visitors			
Food and Beverages in a Bar/Restaurant	\$ 11.36	\$ 18.14	\$ 15.41
Food and Beverages from Grocery/Convenience Store	\$ 3.53	\$ 6.32	\$ 5.20
Sport Activity Fees	\$ 17.75	\$ 28.84	\$ 24.37
Admission to Events and Attractions	\$ 1.88	\$ 4.49	\$ 3.44
Rental Car/Taxi/Bux Fare	\$ 5.47	\$ 11.23	\$ 8.91
Shopping (Clothes, gifts)	\$ 50.47	\$ 38.84	\$ 43.53
Other	\$ 0.84	\$ 6.68	\$ 4.33
Total	\$ 91.30	\$ 114.54	\$ 105.19
Total - All Visitors	\$ 92.69	\$ 105.12	\$ 99.44

On a per person-day basis, summer visitors spent more than winter visitors, but the differences were not statistically significant.

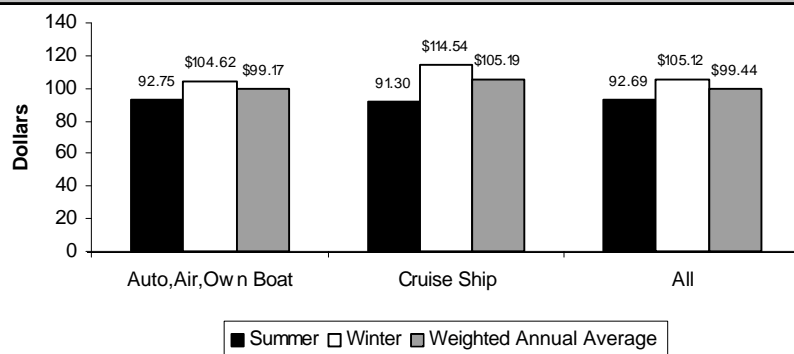


Figure 16. Total Expenditures per Person-day by Season

Table 13. Total Expenditures by Season

Expenditures	Summer	Winter	Annual
Auto, Air and Own Boat Visitors			
Lodging	\$ 239,512,573	\$ 329,865,703	\$ 569,386,622
Food and Beverages in a Bar/Restaurant	\$ 108,617,515	\$ 143,883,508	\$ 252,513,474
Food and Beverages from Grocery/Convenience Store	\$ 21,839,465	\$ 41,909,167	\$ 63,747,211
Sport Activity Fees	\$ 25,047,740	\$ 28,225,830	\$ 53,284,298
Admission to Events and Attractions	\$ 6,468,089	\$ 12,533,583	\$ 19,011,879
Evening Entertainment	\$ 7,601,938	\$ 4,535,843	\$ 12,147,187
Rental Car/Taxi/Bux Fare	\$ 25,666,203	\$ 32,597,423	\$ 58,260,562
Shopping (Clothes, gifts)	\$ 52,775,485	\$ 50,614,448	\$ 103,378,684
Other	\$ 5,372,895	\$ 10,373,056	\$ 15,745,408
Total	\$ 492,901,903	\$ 654,538,561	\$ 1,147,475,325
Cruise Ship Visitors			
Food and Beverages in a Bar/Restaurant	\$ 2,551,854	\$ 6,037,572	\$ 8,590,566
Food and Beverages from Grocery/Convenience Store	\$ 792,962	\$ 2,103,498	\$ 2,898,828
Sport Activity Fees	\$ 3,987,271	\$ 9,598,875	\$ 13,585,471
Admission to Events and Attractions	\$ 422,314	\$ 1,494,416	\$ 1,917,686
Rental Car/Taxi/Bux Fare	\$ 1,228,753	\$ 3,737,703	\$ 4,967,031
Shopping (Clothes, gifts)	\$ 11,337,328	\$ 12,927,195	\$ 24,266,539
Other	\$ 188,693	\$ 2,223,318	\$ 2,413,832
Total	\$ 20,509,176	\$ 38,122,577	\$ 58,639,954
Total - All Visitors	\$ 513,409,622	\$ 692,665,628	\$ 1,206,072,908

Definitions. When a local economy experiences an increase in spending by visitors, residents of that economy benefit by more than just the dollar amount of the goods and services purchased. This is because the businesses serving tourists must increase the amount of labor, goods and services they buy in order to produce the additional goods and services. Thus, the businesses that have experienced increased spending will have a ripple effect on the other businesses that supply them, and those businesses, in turn, effect others on down the supply chain. Economists call the initial spending activity the “direct effect,” and the subsequent ripples are the indirect and induced effects. The indirect and induced effects are also called the multiplier impacts. See the box at right for detailed definitions of these and related terms.

- **Direct Effects:** The amount of the increased purchase of inputs used to manufacture or produce the final goods and services purchased by visitors.
- **Indirect Effects:** The value of the inputs used by firms that are called upon to produce additional goods and services for those firms first impacted directly by recreational spending.
- **Induced effects:** Result from the direct and indirect effects of recreation spending. Induced effects are related to persons and businesses that receive added income as a result of local spending by employees and managers of the firms and plans that are impacted by the direct and indirect effects of recreational spending. This added income results in increased demand for goods and services and, in turn, increased production and sales of inputs.
- **Total Effect:** The sum of direct, indirect, and induced effects (Walsh et. al. 1987). Typically, the total effects are between 1.5 to 2 times more than the amount that the visitors originally spent in the local economy.
- **Total Output:** The value of all goods and services produced by the industries in a sector. For an economy as a whole, total output double-counts the value of production because it accounts for all sales; intermediate outputs are counted every time they are sold. In terms of direct impacts, the additional total output caused by visitor expenditures is equal to the increased final demand, and the increased final demand will roughly equal the dollar value of visitor expenditures, minus the value of items that have to be imported into the region.
- **Value Added:** Total output minus the value of inputs to a sector’s production. As such, value added is the net benefit to an economy, and it contains the sum of employee compensation, indirect business taxes, and property income.
- **Total Income:** The sum of property income and employee compensation.
- **Employment:** The number of full- or part-time jobs.
- **Indirect Business Taxes (IBT):** A component of value added consisting of excise and sales taxes paid by individuals to businesses. These do not include taxes on profit or income.

Economic Contribution to Monroe County. Using the annual expenditures in Monroe County of \$1.1 billion, we estimate the total economic contribution these expenditures made to Monroe County measured in output/sales, income, and the number of full and part time jobs (See definitions box).

Figure 17 summarizes the economic contribution of visitor spending in Monroe County. In the first step, the amount of inputs that are purchased outside Monroe County by businesses receiving visitor spending is subtracted to derive direct output. These purchases of inputs from outside the County are considered a “leakage” of spending by economists. So, the \$1.2 billion in visitor spending had a direct impact of \$884 million in output, and \$382 million in income, which supported 23,113 full and part time jobs.

The total impacts or economic contribution to Monroe County by visitor spending was \$1.35 billion in output/sales and \$611 million in income, which supported 33,188 full and part time jobs.

Visitors accounted for 42.1 percent of Monroe County’s income by place of work. Visitor generated employment accounted for 61.2 percent of all Monroe County employment.

Comparison 1995-96 Versus 2000-2001

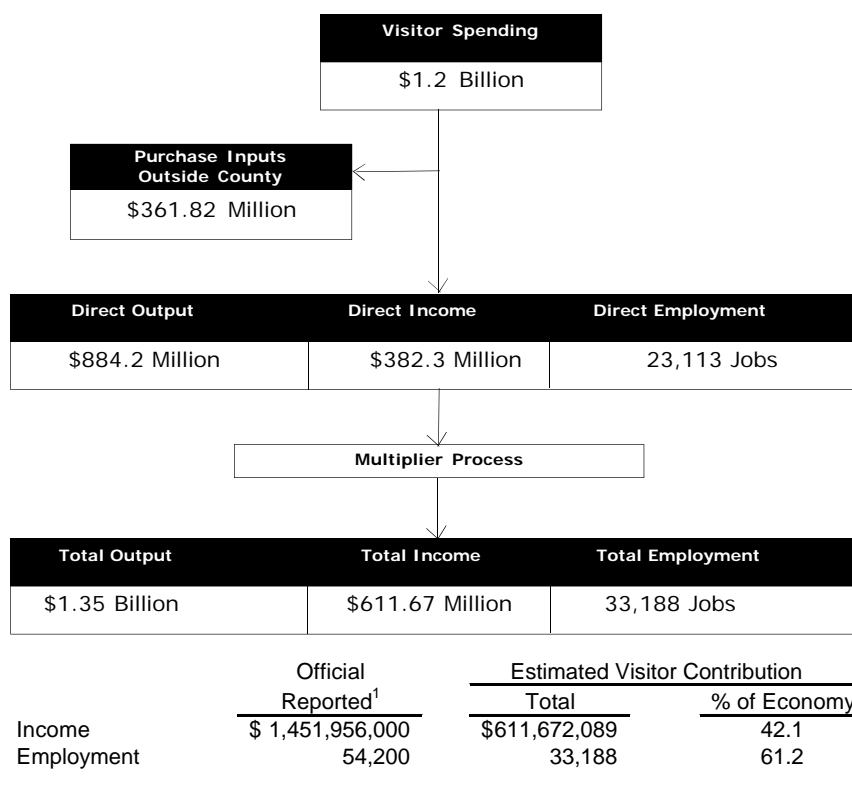
In 1995-96, we estimated the economic contribution of “recreating visitors” to Monroe County (See English et al., 1996). The 1995-96 survey methodology was different than that used in 2000-2001, as was the definition of visitors surveyed. Although we estimated the total number of visitors, we only surveyed those that partici-

pated in some form of outdoor recreation activity. In 2000-2001, we did not screen out visitors based on participation in outdoor recreation activity. In 2000-2001, we also did not adequately sample cruise ship visitors. Thus our 2000-2001 samples were primarily visitors that arrived by auto and air modes of transportation.

In 1995-96, we used a mailback survey to obtain visitor expenditures, while in 2000-2001 visitor expenditure information was obtained in face-to-face interviews on-site. The literature on tourism suggests that on-site interviews will result in underestimation of some expenditure items, especially lodging expenditures. This partially explains the lower per person-trip expenditures estimated for 2000-2001 and compared with that estimated in 1995-96. We adjusted both the summer and winter sample expenditures for lodging based on Florida Department of Revenue Lodging sales for Monroe County. Another explanation is that visitors that did not participate in outdoor recreation activities were included in the 2000-2001 samples. Anecdotal information obtained from the 1995-96 study indicated that many of the visitors that did not participate in outdoor recreation were either elderly visitors visiting family and/or friends and thus their expenditures were lower since they did not have lodging costs.

We employed a slightly different economic model for estimating employment impacts in 2000-2001 as compared with 1995-96, as published in English et al. 1996. We updated the 1995-96 estimates using the 2000-2001 methodology.

One of the most significant factors in comparing 1995-96 and 2000-2001 estimates is the state of the macro economies of the U.S. and Western Europe. Both were in relatively good times in 1995-96, while both economies experienced mild recessions in 2000-2001.



1. Personal Income by Place of work and employment (full and part-time). Year 2000 for Monroe County. U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System.

Figure 17. Impact Process Due to Visitor Spending in Monroe County

Visitation

Table 14 shows estimates of total visitation to Monroe County for years 1995-96 to 2000-2001. Estimates were made for person-trips, person-days and average length of person-trips in terms of days. Between 1995-96 and 2000-2001, person-trips increased only 1.69 percent. Visitation, as measured by person-days, however tells a much different story. The number of person-days is estimated to have declined by over 25 percent from almost 16.3 million person-days in 1995-96 to about 12.1 million person-days in 2000-2001. The average length of trip declined over 26 percent (from 5.32 days per person-trip in 1995-96 to 3.90 days per person-trip in 2000-2001).

A good portion of the decline in person-days and the average length of trip are the result of cruise ship passengers becoming an increasing share of the number of total person-trips. In 1995-96, cruise ship passengers accounted for about 10 percent of all person-trips, while in 2000-2001 cruise ship passengers accounted for almost 18 percent of all person-trips. Cruise ship visitors are all day visitors so increases in the share of all person-trips accounted for by cruise ship visitors lowers the overall average length of stay. Cruise ship passengers accounted for 1.97 percent of all person-days of visitation in 1995-96 and 4.6 percent of all person-days of visitation in 2000-2001.

The Monroe County Economy

Table 15 shows the Monroe County economy, in terms of sales/output, income and employment, for the time period 1986 to 2000-2001. For years 1986 to 1994, all table items are reported for calendar years (January – December). For years 1995-96 to 2000-2001, Sales/Outputs are reported by visitor years (June – May). All other items are reported for calendar years (1995-2000). All items in Table 15 are reported in 1995 dollars using the

Table 14. Monroe County Visitation: 1995-96 to 2000-2001

Year	Person-trips	Person-days	Average Annual Length of Visit (Days)
1995-96	3,057,581	16,273,125	5.32
1996-97	3,186,674	16,396,198	5.14
1997-98	3,531,168	17,684,014	5.00
2000-2001	3,109,397	12,128,068	3.90
% Change 1995-96 to 2000-2001	1.69	-25.47	-26.69

Table 15. Monroe County Economy: 1986 to 2000

Year	Sales (Billions 1995 \$)	Income By Place of Residence (Billions 1995 \$)	Income By Place of Work (Billions 1995 \$)	Employment (Number of Jobs) ¹
1986	1.560	1.604	0.914	40,834
1987	1.768	1.728	0.981	40,670
1988	1.826	1.848	1.018	42,251
1989	1.959	2.037	1.052	43,000
1990	1.908	2.101	1.082	44,160
1991	1.808	2.055	1.050	44,317
1992	1.897	2.045	1.071	44,747
1993	2.049	2.210	1.119	46,298
1994	2.069	2.154	1.096	46,743
1995-96	2.203	2.251	1.125	48,108
1996-97	2.309	2.284	1.132	49,427
1997-98	2.424	2.364	1.155	51,305
1998-99	2.515	2.540	1.221	53,031
1999-00	2.681	2.462	1.235	53,124
2000-01	2.738	2.489	1.285	54,200

1. Number of full and part-time jobs.

Sources: Sales, Total Gross Sales, Monroe County, Florida Department of Revenue. Income and Employment, U.S. Department of Commerce, Bureau of Economic Analysis. CPI, U.S. Department of Labor, Bureau of Labor Statistics.

Consumers Price Index for All Urban Workers.

The Monroe County economy has continued to grow throughout the 1986 to 2000-2001 period for sales, income and employment. To further analyze this information, we divided the 1986 to 2000-2001 time period into three separate time periods based on new regulatory regimes. The five-year period from 1986 through 1991 is the period prior to enactment and implementation of the rate-of-growth ordinance (ROGO). ROGO limits the number of new housing units to 255 per year. We call this period Pre-

ROGO. The second time period is the four-year time period from 1992 through 1996. This time period includes the time period when ROGO was in effect, but was prior to the implementation of the management plan and regulations of the Florida Keys National Marine Sanctuary (FKNMS). We call this period Post-ROGO/Pre-FKNMS. The last time period is the three-year time period from 1997 through 2000. This time period had both ROGO and FKNMS regulations in effect and we call this period Post-ROGO/Post-FKNMS.

Table 16 summarizes the growth rates for each period with the average annual growth rates in parentheses. The results are rather surprising and don't support the common perception that regulations result in slower economic growth. Only the growth rate of Income by Place of Residence declined with each new layer of regulation. Both Sales and Employment grew at faster rates Post-ROGO/Pre-FKNMS versus Pre-ROGO, while the growth rate for Income by Place of Work declined. In the Post-ROGO/Post-FKNMS time period, Sales and Employment growth rates declined, while Income by Place of Work grew at a faster rate than either the Post-ROGO/Pre-FKNMS or Pre-ROGO time periods.

Between 1990 and 2000, the population in Monroe county increased from 78,024 to 79,589 according to the U.S. Department of Commerce, Bureau of the Census. This increase of 1,565 people over the ten-year period amounted to only a two percent increase. Housing units increased from 46,215 units to 51,617 units or an increase of 5,402 units (an 11.69% increase). In contrast, employment increased from 44,160 full and part-time jobs to 54,200 jobs. An increase of 10,040 jobs or a 22.7 percent increase.

What appears to be happening is that the Monroe County economy continues to grow and is generating income and jobs, but because of limited and/or affordable housing, the additional employment must be supplied by workers from outside the County. These imported workers take their incomes outside Monroe County. This in turn lowers the multiplier impacts from spending in the County. This partially explains the lower growth rates in Income by Place of residence versus Income by Place of Work and employment.

Table 16. Growth Rates for the Monroe County Economy

Time Period	Growth Rates (%)			
	Sales/Output	Income by Place of Residence	Income by Place of Work	Employment
1986 - 1991 Pre-ROGO ¹	15.9 (3.2) ³	28.1 (5.6)	14.9 (3.0)	8.5 (1.7)
1992 - 1996 Post ROGO/Pre-FKNMS ²	21.7 (5.4)	11.7 (2.9)	5.7 (1.4)	10.5 (2.6)
1997 - 2000 Post ROGO/ Post FKNMS	13.0 (4.3)	5.3 (1.8)	11.3 (3.8)	5.6 (1.9)

1. ROGO - Rate of Growth Ordinance that limits number of housing units to 255 units/year.

2. FKNMS - Florida Keys National Marine Sanctuary, effective July 1, 1997.

3. Average annual rate of growth in parentheses.

Table 17. Economic Contribution of Visitors: 1995-96 versus 2000-2001

Item	1995-96	2000-2001	2000-2001 (1995 \$) ¹	Percent Change 1995-96 to 2000-2001	
				Nominal	Real
Expenditures	\$1.19 billion	\$1.21 billion	\$1.07 billion	1.68	-10.10
Sales/Output	\$1.33 billion	\$1.35 billion	\$1.19 billion	1.50	-10.50
Income	\$506.0 million	\$611.7 million	\$541.3 million	20.88	7.00
Employment	33,269	33,188	-	-0.24	-0.24
Average Expenditures Per Person-trip	\$454.45	\$387.88	\$343.28	-14.65	-24.46
Average Expenditures Per Person-day	\$108.97	\$99.44	\$88.00	-8.75	-19.24

1. 2000-2001 dollars converted to 1995 dollars using the Consumers Price Index for all Urban Workers, U.S. Department of Labor, Bureau of Labor Statistics.

Economic Contribution of Visitors 1995-96 Versus 2000-2001

Between 1995-96 and 2000-2001, total visitor expenditures increased 1.68 percent in nominal dollars (not adjusted for inflation), but declined 10 percent in inflation adjusted dollars (real). Sales/Output, after accounting for multiplier impacts, showed a similar pattern. Income generated by the visitor spending increased in nominal dollars by almost 21 percent, but only 7 percent in inflation adjusted dollars. Employment supported by visitor spending declined by only a fraction of one percent (Table 17).

The mild recessions in the U.S. and Europe certainly explain part of the declines in visitor contribution to the

Monroe County economy. Of most significance has been the decline in the proportion of visitors that arrive by auto and air modes of transportation and the corresponding increase in the share of visitors accounted for by cruise ship passengers. Cruise ship visitors are only day visitors and they spend less per person-trip than auto and air visitors. Average length of trip declined from 5.33 days per person-trip in 1995-96 to 3.90 days per person-trip in 2000-2001. Also, expenditures per person-trip declined from \$454.45 to \$387.88 in nominal dollars or to \$343.60 in inflation adjusted dollars.

Between 1995-96 and 2000-2001, visitor economic contribution has declined as a proportion of the entire Monroe County economy. In 1995-96,

visitors accounted for over 60 percent of all Sales/Output. In 2000-2001, visitors accounted for only 44 percent of all Sales/Output. Visitor relative contributions to the economy also declined for income and employment ((See Table 18).

References.

English, D.B.K., W. Kriesel, V.R. Leeworthy, P.C. Wiley, 1996. *Economic Contribution of Recreating Visitors to the Florida Keys/ Key West*. Athens, GA: Outdoor Recreation and Wilderness Assessment Group, Southern Forest Research Station, USDA Forest Service. Athens, GA: Department of Agricultural and Applied Economics, University of Georgia. Silver Spring, MD: Strategic Environmental Assessments Division, National Ocean Service, National Oceanic and Atmospheric Administration. 22 pp.

Walsh, R.G. et al. 1987. Wildlife and fish use assessment: Long-run forecasts of participation in fishing, hunting, and non-consumptive Wildlife recreation. Colorado State University, Technical Report 50.

Table 18. Visitor Economic Contribution Relative to the Monroe County Economy:1995-96 versus 2000-2001

Item	Percent of the Economy	
	1995-96	2000 - 2001
Sales/Output	60.5	44.3
Income		
Place of Residence	47.7	42.1
Place of Work	23.7	21.7
Employment	67.3	61.2

Appendix

Table A.1. States of Visitor Residence by Season

	Summer		Winter		Annual	
	All Visitors (%)	U.S. Visitors Only (%)	All Visitors (%)	U.S. Visitors Only (%)	All Visitors (%)	U.S. Visitors Only (%)
Alaska	0.0%	0.0%	0.2%	0.2%	0.1%	0.1%
Alabama	0.6%	0.7%	0.4%	0.5%	0.5%	0.6%
Akansas	0.0%	0.0%	0.2%	0.2%	0.1%	0.1%
Arizona	0.3%	0.4%	0.0%	0.0%	0.2%	0.2%
California	1.4%	1.6%	1.2%	1.6%	1.3%	1.5%
Colorado	0.9%	1.1%	0.9%	1.1%	0.9%	1.1%
Connecticut	0.8%	0.9%	2.0%	2.5%	1.3%	1.5%
Washington D.C.	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Delaware	0.0%	0.0%	0.7%	0.9%	0.3%	0.4%
Florida	49.7%	56.7%	23.7%	30.0%	37.6%	43.6%
Foreign	12.3%	14.1%	15.3%	19.4%	13.7%	15.9%
Georgia	1.4%	1.6%	1.6%	2.0%	1.5%	1.7%
Iowa	0.0%	0.0%	0.7%	0.9%	0.3%	0.4%
Illinois	1.2%	1.4%	4.8%	6.1%	2.9%	3.4%
Indiana	0.9%	1.1%	2.5%	3.2%	1.7%	1.9%
Kansas	0.5%	0.5%	0.2%	0.2%	0.3%	0.4%
Kentucky	0.9%	1.1%	0.4%	0.5%	0.7%	0.8%
Massachusetts	1.5%	1.8%	3.7%	4.7%	2.6%	3.0%
Maryland	2.8%	3.2%	1.6%	2.0%	2.2%	2.6%
Maine	0.0%	0.0%	0.7%	0.9%	0.3%	0.4%
Michigan	0.8%	0.9%	3.4%	4.3%	2.0%	2.3%
Minnesota	0.3%	0.4%	2.8%	3.6%	1.5%	1.7%
Missouri	0.6%	0.7%	0.2%	0.2%	0.4%	0.5%
Mississippi	0.0%	0.0%	0.2%	0.2%	0.1%	0.1%
North Carolina	1.4%	1.6%	1.4%	1.8%	1.4%	1.6%
Nebraska	0.2%	0.2%	0.0%	0.0%	0.1%	0.1%
New Hampshire	0.2%	0.2%	0.9%	1.1%	0.5%	0.6%
New Jersey	2.3%	2.6%	3.9%	5.0%	3.1%	3.5%
New Mexico	0.0%	0.0%	0.5%	0.7%	0.2%	0.3%
New York	4.3%	4.9%	7.5%	9.5%	5.8%	6.7%
Ohio	2.9%	3.3%	5.0%	6.3%	3.9%	4.5%
Oklahoma	0.0%	0.0%	0.2%	0.2%	0.1%	0.1%
Oregon	0.6%	0.7%	0.7%	0.9%	0.7%	0.8%
Pennsylvania	2.5%	2.8%	4.3%	5.4%	3.3%	3.8%
Rhode Island	0.0%	0.0%	0.7%	0.9%	0.3%	0.4%
South Carolina	1.1%	1.2%	0.9%	1.1%	1.0%	1.1%
South Dakota	0.0%	0.0%	0.2%	0.2%	0.1%	0.1%
Tennessee	1.2%	1.4%	0.4%	0.5%	0.8%	1.0%
Texas	2.2%	2.5%	1.2%	1.6%	1.7%	2.0%
US Territories	0.3%	0.4%	0.0%	0.0%	0.2%	0.2%
Utah	0.0%	0.0%	0.2%	0.2%	0.1%	0.1%
Virginia	2.0%	2.3%	1.6%	2.0%	1.8%	2.1%
Vermont	0.0%	0.0%	0.5%	0.7%	0.2%	0.3%
Washington	1.1%	1.2%	0.5%	0.7%	0.8%	1.0%
Wisconsin	0.5%	0.5%	1.8%	2.3%	1.1%	1.2%
West Virginia	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%

General Visitors Survey	
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Expiration Date: 7/31/2003

Screening/Talley Sheet

Interviewer:

Interviewer Location (circle county): Palm Beach Broward Dade Monroe

1. Are you a permanent resident of (County of interview)?

- ☐ YES. Thank you. We are only interviewing non-residents of (county of interview). (Place tic mark in column 4)
- ☐ NO. 2. Are you ending your trip to (county of interview) today?
NOTE: If the person is a scuba diver or is leaving before noon the next day, proceed with the interview
- ☐ NO. Thank you. (Place tic mark in column 5)
- ☐ YES. Will you participate in a short 5-15 minute interview about your visit to (county of interview)?
- ☐ NO. Thank you. (Place tic mark in column 6)
- ☐ YES. *Go to Questionnaire* (Place tic mark in column 8)

NOTE: If language Barrier, place tic mark in column 7

[illegible]

General Visitors Survey

OMB Approval #:0648-0410
Expiration Date 7/31/2003

Screening Criteria: 1) NOT a resident of county of interview.
2) Meets exit condition

Onsite survey number: _____

Date/time of interview: _____

County of Interview: _____

Month Day Time

1. a) How many people are here with you on your visit to (county of interview) (do not include

people

1. b) How many of these people are not permanent residents of (county of interview)

people

2. How many of these people are 16 or older (do not include respondent)?

people

3. Where is your primary residence?

City or nearest city

County

State

Zipcode

Country: _____

☐ USA

☐ Canada

☐ Mexico

☐ Central/South America

☐ Australia/Oceania

☐ Japan

☐ Other Far East

☐ United Kingdom

☐ Other Europe

☐ Middle East

☐ Africa

☐ Other

4. a) On this trip to (county of interview), when did you first arrive?

Month Day Time

b) On this trip to (county of interview), when do you plan to leave?

Month Day Time

5. Including this trip, how many times have you visited (county of interview) in the last 12 months -
that is, since (date last year)?

times

General Visitors Survey

OMB Approval #:0648-0410

Expiration Date:7/31/2003

6. Including this trip, how many days have you spent in (county of interview) in the last 12 months?

_____ # days

7. How many overnight trips have you made to (county of interview) in the last 12 months?

_____ # overnight trips

8. On this trip, how many nights will you have spent in (county of interview)?

_____ # nights

9. Look at Section 1 of the Green Card. How did you and those in your group who are not permanent residents of (county of interview) get to (county of interview)? Please give the letters of all that apply. (*Circle all that apply*)

A Automobile - private

B Automobile - rental

C Air - Miami

D Air - Ft Lauderdale/

Hollywood

E Air - West Palm Beach

F Air - Tampa

G Air - Orlando

H Air - Marathon

I Air - Key West

J Air - other Florida

Specify _____

K Cruise ship

L Own boat

M Other

Specify _____

10. Where are you staying or did you stay on this trip to (county of interview)? Please read me the number from Section two of the Green Card.

1 = Hotel/Motel/Guest House/
Bed & Breakfast

2 = Home of family/friends

3 = Campground

4 = Condominium, or second home (own),
excluding time shares

5 = Vacation Rental

6 = Time Share

Please refer to the White Card with the Activities List.

11. Over the last 12 months, did you or someone in your current group who is not a resident of (county of interview) engage in any kind of saltwater boating when visiting (county of interview)?

☐ YES Go to Q12.

☐ NO Go to Q15.

**HAND RESPONDENT WHITE CARD WITH
ACTIVITIES LIST**

I would now like to ask you about some of the activities in which you, or someone in your group, participated in while on your visits to (county of interview).

- Q12. In which of these activities did you or someone in your group participate during the last 12 months?
- Q13. As I read each activity in which you said you or someone in your group participated, could you tell me which activity YOU participated in during the past 12 months? *If the person is alone, skip to Q15.*
- Q14. Now as I read each activity would you tell me how many others in your group who are not residents of (county of interview) participated in the activity in (county of interview) during the past 12 months?

Last 12 months					
Activity			Resp	#	Others
_____	_____	_____	<input type="radio"/>	_____	_____
_____	_____	_____	<input type="radio"/>	_____	_____
_____	_____	_____	<input type="radio"/>	_____	_____
_____	_____	_____	<input type="radio"/>	_____	_____
_____	_____	_____	<input type="radio"/>	_____	_____
_____	_____	_____	<input type="radio"/>	_____	_____
_____	_____	_____	<input type="radio"/>	_____	_____

- Q15. Please refer to Section 3 on your green card and tell me which reason best describes your primary purpose of your trip to (county of interview). Please read the letter from the green card.

- A Recreation or vacation
- B Visit family or friends
- C Business trip
- D Business and pleasure
- E Other (specific) _____

General Visitors Survey

OMB Approval #:0648-0410
Expiration Date:7/31/2003

Now I would like to ask you about your trip expenses. Please provide your best estimate of the total for each category for your party for this trip. Include only the amounts spent in this county.

- Q16 _____ Lodging accommodations
- Q17 _____ Food & beverage at restaurants/bars
- Q18 _____ Food & beverage at grocery/convenient stores
- Q19 _____ Sport activities including charter/party/guide fees, boat ramp/marine fees, tackle and bait fees
- Q20 _____ Admission to events and attractions
- Q21 _____ Evening entertainment
- Q22 _____ Rental car, taxi, bus fares
- Q23 _____ Shopping (clothing, gifts, souvenirs)
- Q24 _____ All other
- Q25 How many people in your party spent or benefited from these expenditure? _____
of People

Finally, for statistical purposes, we need to know a few things about you.

- Q26. In what year were you born? 19 ____ ____
- Q27. Sex: Male _____ Female _____ (Observed, not asked)
- Q28. Are you Hispanic, Latino or of Spanish origin?
- ☐ YES ☐ NO

Q29. Please refer to Section 4 of the green card and tell me which category best describes you.

- A White
- B Black or African American
- C American Indian or Alaska Native
- D Native Hawaiian or other Pacific Islander
- E Asian
- F Other

Q30. Please refer to section 5 of the green card and tell me which income category best describes your annual household income last year before taxes. Please give me the letter on the card corresponding to the amount that is the closest to your annual household income.

☐ a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐ h ☐ i ☐ j ☐ k ☐ l ☐ m ☐ n ☐ o

☐ Refused

☐ Don't know

That's it. Thank you very much for participating in this survey. I hope you enjoyed your stay.

GREEN CARD

PRIVACY ACT STATEMENT

Your participation is voluntary. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless the collection of information displays a currently valid OMB Control Number.

Since each interviewed person will represent many others not interviewed, your cooperation is extremely important. This study is being conducted by Hazen & Sawyer and the Florida State University for the State of Florida, Palm Beach, Broward, Miami-Dade and Monroe Counties and the National Oceanic and Atmospheric Administration. Uses of the information include evaluation of present recreation uses and planning for future recreation visitation. At the end of the study any materials identifying you such as name, address or telephone number will be destroyed. All other information will be available for distribution. The interview should take 5 to 15 minutes with an average of 10 minutes.

Section 1. Modes of Transportation

A = Automobile – private

B = Automobile – rental

C = Air – Miami

D = Air – Ft. Lauderdale/

Hollywood

E = Air – West Palm Beach

F = Air – Tampa

G = Air – Orlando

H = Air – Marathon

I = Air – Key West

J = Air – Other Florida

Specify _____

K = Cruise Ship

L = Own boat

M = Other

Specify _____

Section 2. Overnight Accommodations

1 = Hotel/Motel/Guest House/
Bed & Breakfast

2 = Home of family/friends

3 = Campground

4 = Condominium or Second Home (own),
excluding time shares

5 = Vacation Rental

6 = Time Share

Section 3. Primary Purpose of Trip

A = Recreation or Vacation

B = Visit family or friends

C = Business trip

D = Business and Pleasure

E = Other (Specific)

Section 4. Race/Ethnicity

A. White

B. Black or African American

C. American Indian or Alaska Native

D. Asian

E. Native Hawaiian or Other Pacific Islander

F. Other

---OVER---

GREEN CARD

Section 5. Annual Household Income before Taxes

Please give only the letter of your income category.

- | | |
|------------------------|--------------------------|
| A Less than \$5,000 | I \$40,000 to \$44,999 |
| B \$5,000 to \$9,999 | J \$45,000 to \$49,999 |
| C \$10,000 to \$14,999 | K \$50,000 to \$59,999 |
| D \$15,000 to \$19,999 | L \$60,000 to \$74,999 |
| E \$20,000 to \$24,999 | M \$75,000 to \$99,999 |
| F \$25,000 to \$29,999 | N \$100,000 to \$149,999 |
| G \$30,000 to \$34,999 | O \$150,000 or more |
| H \$35,000 to \$39,999 | |

WHITE CARD

ACTIVITIES LIST

Number	Activities by Boat in Saltwater
	<u>Snorkeling</u>
100	Snorkeling from charter/party boat (pay operation)
101	Snorkeling from Rental boat
102	Snorkeling from private boat (own boat/friend's boat)
	<u>Scuba Diving</u>
200	Scuba diving from charter/party boat (pay operation)
201	Scuba diving from rental boat
202	Scuba diving from private boat (own boat/friend's boat)
	<u>Special Activities while Snorkeling or Scuba Diving</u>
300	Diving for lobsters
301	Underwater photography
302	Wreck diving
303	Spear fishing
304	Collecting tropical fish or shellfish
305	Current/drift diving
	<u>Fishing - Offshore/Trolling</u>
400	Fishing from charter boat (pay operation six persons or less) - offshore
401	Fishing from party or head boat (charge per person) - off shore
402	Fishing from rental boat - offshore
403	Fishing from private boat (own boat/friend's boat) - offshore
	<u>Fishing - Flats or Back Country</u>
404	Fishing from Charter/party boat (pay operation) - flats or back country
405	Fishing from rental boat - flats or back country
406	Fishing from private boat (own boat/friend's boat) - flats or back country
	<u>Fishing - Bottom</u>
407	Bottom fishing from charter boat (pay operation six persons or less)
408	Bottom fishing from party or head boat (charge per person)
409	Bottom fishing from rental boat
410	Bottom fishing from private boat (own boat/friend's boat)
	<u>Viewing Nature and Wildlife</u>
500	Glass bottom boat rides (pay operation)
501	Back country boating excursions (pay operation/guided service/ <u>NOT FISHING</u>)
502	Viewing nature and wildlife from rental boat
503	Viewing nature and wildlife from private boat (own boat/friend's boat)
	<u>Personal Watercraft (jet skis, wave runners, etc.)</u>
600	Personal watercraft - rental
601	Personal watercraft - private (own boat/friend's boat)
	<u>Sailing</u>
700	Sailing charter/party boat (pay operation)
701	Sailing rental boat
702	Sailing private boat (own boat/friend's boat)
	<u>Other Activities NOT MENTIONED ABOVE</u> (parasailing, hang gliding, sunset cruises, water-skiing)
800	Other activities from charter/party (pay operation)
801	Other activities from rental boat
802	Other activities from private boat (own boat/friend's boat)